

D. MANUFACTURING TECHNOLOGY (ManTech)



The ManTech Program is an important element in the Defense Department's actions to affordably acquire and sustain equipment for the warfighter. Emphasis is on maturing defense-essential manufacturing technologies to foster the

rapid, low-risk transition of advanced technology into new systems and to extend the useful life of existing military systems. Investments made by the Military Departments and the Defense Logistics Agency (DLA) are grouped into two broad technology areas - Processing and Fabrication (P&F) and Advanced Manufacturing Enterprise (AME). P&F projects develop affordable, robust manufacturing processes for metals, composites, electronics, and specialty materials critical to defense applications over their full life cycle. AME projects encompass the entire chain of people, tools, and activities that develop, produce, and maintain a weapon system --- a chain that links commercial companies, defense contractors, maintenance depots, and military customers.

The appropriated funding level for Military Departments and Defense Logistics Agency (DLA) ManTech programs in FY 98 and FY 99 was \$145 million and \$185 million, respectively. The budget request for FY 00 is \$134 million. A 5-year ManTech plan is being submitted to the Authorization Committees concurrent with the FY 00 President's Budget request.

Technology Transfer & Dual Use

The ManTech program is driven by defense needs for technologies and systems that provide a superior edge to the warfighters. In today's environment, DoD is involving the commercial industrial base as soon as possible, by either adopting its best practices or transferring results of military processes to the commercial arena. For example:

- The Navy's Best Manufacturing Practices (BMP) program, part of Navy ManTech, was named a winner of the 1998 Innovations in American Government awards. Recognized as one of the most prestigious public-service awards in the country, the Innovations award is sponsored by the Ford Foundation, and administered by Harvard University's John F. Kennedy School of Government in partnership with the Council for Excellence in Government. The award recognizes programs and policies that represent original and effective government initiatives at the federal, state, and local levels. For over ten years, the BMP survey process has been an avenue for industry (commercial and defense) and government to present individual and distinctive success stories in manufacturing disciplines by conducting on-site surveys for companies that are interested in sharing nonproprietary information.
- As a part of a Cooperative Agreement with the Air Force Research Laboratory, Silicon Integration Initiative, Inc., recently released the Electronic Component Information Exchange representation format. The information format and associated tools permits the exchange of electronic component information for system designers and engineers to make informed decisions on component selection early in the development process. This facilitates component selection via information available on the Internet and the feeding of engineering design tools with electronic data needed for detailed design and manufacturing. The format and commercial tool offerings have been demonstrated recently to leading electronic system developers and received positive comments and interest.

Recent Management Initiatives & Accomplishments

The S&T Affordability Task Force continues to establish processes to strengthen the affordability content of the DoD's S&T programs. The objective is to identify mechanisms that focus DoD's technology programs on implementing Integrated Product and Process Development (IPPD) and facilitate use of Integrated Product Teams. In 1998, the Task Force sponsored a conference attended by over 250 S&T managers and industry to share affordability best practices and lessons learned; reviewed and evaluated selected S&T programs for attention to affordability; and developed an awareness course to help S&T managers on affordability concepts. 1999 activities will focus on improving the process for transitioning the results of 6.3 advanced technology development efforts into acquisition, and publishing a handbook for S&T managers to use during formulation of affordability programs.

The Defense Manufacturing Conference (DMC) continues to be a premier activity for networking and sharing the results of ongoing and completed manufacturing and dual-use programs across the DoD, industry, and other government agencies. The 1998 conference was held in New Orleans, LA. Over 900 leaders from government, industry, and academia attended. Keynote speakers included Dr. Lance Davis, ODDR&E; MG John Caldwell, Army Materiel Command; Marc Morial, Mayor of New Orleans; Stan Soloway, Acquisition Reform; and Thomas Rabaut, United Defense Limited Partnership. The conference featured a customer perspective from both the Authorization staffers and the Program Managers for Joint Strike Fighter, Comanche, Crusader, and F-22. Exchange of technical information was promoted by use of concurrent briefings spanning over 100 technical projects, and via evening receptions held with over 50 exhibitors from DoD, industry, and academia.

To improve Congressional awareness of the program, a ManTech "Day on the Hill" was held in February 1998 to coincide with USD(A&T) testimony to the House National Security Committee Military Procurement and Research and Development Subcommittees. ODDR&E worked with the Military Departments, DLA, and industry associations to set up ManTech displays in the foyer of the Rayburn Office Building. Displays and poster sessions highlighted ManTech technical accomplishments that are contributing to the Department's goals for affordability, military/commercial integration, and improved weapon system performance.

Recommendations for Program Improvements

Section 2525 of Title 10 directs cost sharing on all ManTech projects. Section 213 of the Strom Thurmond Defense Authorization Act for FY 99 revised this requirement. Difficulties are still being experienced with this requirement, and we plan to submit a legislative proposal to resolve these problems.